Remarks

Claims 1-8 stand rejected as being anticipated by or unpatentable over Lindgren (US 4,940,503) and/or Veneziale, Jr. (US 3,663,341). As noted by the Examiner, the Lindgren '503 patent discloses applying hard particles to a so-called decor paper impregnated with a thermosetting resin, and then applying a conventional overlay paper over the particle-coated decor paper (column 2, lines 33-35). This is a conventional practice the present invention seeks to avoid. As indicated on page 3 at lines 11-16 of the present application, a laminate coating can be produced in one step, as opposed to the relatively expensive, uneconomical two step process involving the production of a separately applied overlay, as taught by the Lindgren '503 patent (see page 2, lines 8-12 of the present application).

The need to apply a separate conventional overlay sheet is avoided by the method of claim 1, wherein a covering layer of <u>fibre</u> material containing melamine resin is applied onto the particle coated sheet. The fibre material, and particularly the fibre fleece of claim 2, is different from the conventional overlay sheet. This should be immediately evident by comparing the conventional overlay sheet appended hereto as Exhibit A and the fibre fleece material appended hereto as Exhibit B.

The Examiner states in the last Office Action that the original disclosure does not provide a specific meaning to "a covering layer of fiber material" that would distinguish it from the overlay sheet of Lindgren. A specific meaning, however, is not needed as resort to a dictionary provides adequate distinction between a fibre material and the prior art overlay sheet. Webster's Revised Unabridged Dictionary, © 1996, 1998 provides the following definition of fibre:

fiber (\Fi"ber\, Fibre \Fi"bre\,, n. [F. fibre, L. fibra.])

- 1. One of the delicate, threadlike portions of which the tissues of plants and animals are in part constituted; as, the fiber of flax or of muscle.
- 2. Any fine, slender thread, or threadlike substance; as, a fiber of spun glass; especially, one of the slender rootlets of a plant.

3. Sinew; strength; toughness; as, a man of real fiber.

Yet had no fibers in him, nor no force. -- Chapman.

4. A general name for the raw material, such as cotton, flax, hemp, etc., used in textile manufactures.

Fiber gun, a kind of steam gun for converting, wood, straw, etc., into fiber. The material is shut up in the gun with steam, air, or gas at a very high pressure which is afterward relieved suddenly by letting a lid at the muzzle fly open, when the rapid expansion separates the fibers.

Fiber plants (Bot.), plants capable of yielding fiber useful in the arts, as hemp, flax, ramie, agave, etc.

The paper overlay sheet of Lindgren does not meet the definition of a fiber material.

Moreover, claim 2 calls for a fiber fleece. Webster's Revised Unabridged Dictionary, © 1996, 1998 provides the following definition of fleece:

fleece (\Fleece\, n. [OE. flees, AS. fle['o]s; akin to D. flies, vlies .])

- 1. The entire coat of wood that covers a sheep or other similar animal; also, the quantity shorn from a sheep, or animal, at one time.
 - Who shore me Like a tame wether, all my precious fleece. --Milton.
- 2. Any soft woolly covering resembling a fleece.
- 3. (Manuf.) The fine web of cotton or wool removed by the doffing knife from the cylinder of a carding machine.

Fleece wool, wool shorn from the sheep.

Golden fleece. See under Golden.

Clearly, the paper overlay sheet of Lindgren does not meet the definition of a fibre fleece.

In tacit acknowledgment of the foregoing, the Examiner turns to Veneziale which the Examiner cites as evidence of the variety of well-known forms that are suitable for the top (overlay) sheet, including a mat or fibre fleece. The undersigned has reviewed the Veneziale patent and while finding a reference to a mat, no reference to a fibre fleece was found. Thus, the combination of Veneziale and Lindgren, even if permissible, does not yield the subject matter of claim 2.

In addition, it is submitted that the skilled person would not have been motivated to modify the methodology of Lindgren in view of Veneziale. Lindgren recognized a need to improve the abrasion resistance of the laminates exposed to an extreme abrasion. Lindgren observed as follows:

It has been tried before to improve the abrasion resistance of these laminates by addition of small, hard particles for instance of aluminum oxide already at the production of the overlay paper of .alpha.-cellulose. Then the particles have been spread over a layer of wet .alpha.-cellulose fibers on the wire of a paper machine.

With this method, the particles are distributed more or less irregularily within the whole fibre layer. Some of these particles even pass through the wire. Thus, in the overlayer paper obtained the hard particles will be distributed in an uncontrollable way. It is impossible by this known method to get an even distribution of the hard particles on the surface of the paper, where they give the best effect against abrasion.

In other words, the laminates obtained containing such an overlay sheet will get an uneven quality regarding abrasion resistance.

Lindgren, column 1, lines 38-54. Recognizing the foregoing problem, Lindgren devised a way to avoid the above mentioned problem. As stated by Lindgren:

So far it has not been possible to avoid the above mentioned problem in a satisfactory way. However, according to the present invention it has quite unexpectedly been possible to solve the above problem and bring about a process for the production of a decorative thermosetting laminate with an abrasion-resistant surface layer, which laminate comprises paper sheets impregnated with a thermosetting resin. A continuous paper is then impregnated with a thermosetting resin such as melamine-formaldehyde resin. At least one side of the continuous paper is coated with 2-20 g/m², preferably 3-12 g/m² of small, dry and hard particles evenly distributed over the whole wet surface of resin on the continuous paper. Thereafter the resin is dried and the particle coated, impregnated paper, so-called prepreg is possibly cut to sheets. At least one such sheet or continuous layer is placed as a surface layer on a base layer and bonded thereto.

Lindgren, column 1, line 58 through column 2, line 7. In addition, Lindgren taught:

The particle coated paper sheet often consists of a so-called overlay paper, preferably of α -cellulose. However, instead it is also possible to apply the hard particles to the so-called decor paper.

Sometimes you can coat both the overlay paper and the decor paper with particles or use two or more such particle coated overlay papers. It is also possible to put a conventional overlay sheet, which is not coated with particles, over the particle coated sheet or sheets.

Lindgren, column 2, lines 26-35.

Veneziale, filed almost 20 years prior to Lindgren, has nothing to do with the problem addressed by Lindgren, i.e., the uneven distribution of wear-enhancing hard particles in a decorative laminate. The skilled person would not view Veneziale as having anything to add to the teachings of Lindgren in respect of the formation of a decorative laminate containing hard particles. Perhaps more importantly, Veneziale offers no hint that any of the other overlay materials mentioned by Veneziale could me successfully employed in the process of Lindgren. There simply is lacking any suggestion or modification to modify Lindgren as contended by the Examiner. The only guidance arises from applicants' specification, and hindsight reliance thereon is clearly improper. Also, it again is noted that neither reference mentions the use of a fibre fleece.

The Examiner also seeks to substantiate the rejections by contending that there is no conclusive evidence of unexpected results to establish criticality for the claimed layer form. First, the existence or nonexistence of unexpected results is not at issue if there is lacking adequate suggestion or motivation to modify Lindgren in a manner that gives rise to the claimed subject matter. Second, a clear benefit is obtained, in that the invention enables the avoidance of the separate production of a conventional overlay sheet and - as a consequence - reduces costs.

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Serial No. 09/647,130

Respectfully submitted,

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